

IN THE CLAIMS

1. (Currently Amended) A fiberglass insulation binder composition comprising a polycarboxy polymer, a polyhydroxy crosslinking agent, ~~a mineral oil dust suppressing agent, a surfactant selected from the group consisting of cationic surfactants, amphoteric surfactants, nonionic surfactants, and mixtures thereof~~, and sufficient water to provide a mixture comprising up to 98 wt-% water based on the total weight of solids in the mixture, said surfactant being added in an amount sufficient to control the surface tension to less than the surface tension of an equivalent weight percent solids phenolic binder.

2. (Canceled)

3. (Canceled)

4. (Original) The fiberglass insulation binder composition of claim 1, wherein the polycarboxy polymer is a polyacrylic acid polymer.

5. (Currently Amended) A process for producing a fiberglass insulation binder comprising the steps of:

preparing a mixture of a polycarboxy polymer, a polyhydroxy crosslinking agent, ~~a mineral oil dust suppressing agent, a surfactant selected from the group consisting of cationic surfactants, amphoteric surfactants, nonionic surfactants, and mixtures thereof~~, and sufficient water to provide a mixture comprising up to 98 wt-% water based on the total weight of solids in the mixture, said surfactant being added in an amount sufficient to control the surface tension of the binder to less than 66 dyne/cm, and

blending the mixture to form a polymeric composition useful as a fiberglass insulation binder.

6. (Original) The process of claim 5, wherein the amount of surfactant employed ranges from about 0.01 to about 10 weight percent based on the total weight of binder solids.

7. (Original) The process of claim 6, wherein the amount of surfactant employed ranges from about 0.2 to about 5 weight percent based on the total weight of binder solids.

8. (Original) The process of claim 5, wherein a pre-mixture containing the polymer and crosslinking agent comprises about 50 to 60 wt-% water.

9. (Original) The process of claim 5, further comprising the step of adding a hydrolyzed silane coupling agent to the mixture.

10. (Original) The process of claim 9, wherein the weight of hydrolyzed silane coupling agent added is from 0.01 to 10 wt-% based upon the weight of the mixture.

11. (Canceled)

12. (Currently Amended) The process of claim 1, wherein ~~the weight of a~~ mineral oil dust suppressing agent is added ~~is in an amount~~ up to 20 wt % based upon the weight of the mixture.

13. (Original) The process of claim 5, wherein the polycarboxy polymer is a polyacrylic acid polymer.

14. (Canceled)

15. (Canceled)

16. (Currently Amended) The process of claim 145, wherein curing is carried out in a curing oven at a temperature from 200°C to 350°C (392°F to 617°F) for 30 seconds to 3 minutes.

17. (Canceled)

18. (Currently Amended) A process for manufacturing a fiberglass insulation product, which comprises the steps of:

supplying melted glass to a fiber forming device;  
blowing said melted glass downwardly within a forming chamber of said forming device to attenuate glass fibers;

~~applying the binder composition of claim 1a~~ binder composition including a polycarboxy polymer, a polyhydroxy crosslinking agent, a surfactant, and sufficient water to

provide a mixture having up to 98 wt% water based on the total weight of solids onto said glass fibers, said surfactant being added in an amount sufficient to control the surface tension to less than the surface tension of an equivalent weight percent solids phenolic binder;  
depositing said glass fibers onto a foraminous forming conveyor within said forming chamber;

gathering and forming said glass fibers into a mat on said conveyor using a vacuum drawn through said mat from below said forming conveyor, wherein residual heat contained in said glass fibers and said vacuum volatilizes said water; and  
and curing the mat so treated.

19. (Currently Amended) The process of claim 1718, wherein curing is carried out in a curing oven at a temperature from 200°C to 350°C (392°F to 617°F) for 30 seconds to 3 minutes.

20. (Canceled)

21. (New) The binder composition of claim 1, wherein the surface tension of the binder is less than about 65.75 dyne/cm.

22. (New) The binder composition of claim 21, wherein the surface tension of the binder is less than about 62.87 dyne/cm.

23. (New) The binder composition of claim 22, wherein the surface tension of the binder is less than about 60.54 dyne/cm.

24. (New) The process for producing a binder composition of claim 5, wherein the surface tension of the binder is less than about 65.75 dyne/cm.

25. (New) The process of claim 24, wherein the surface tension of the binder is less than about 62.87 dyne/cm.

26. (New) The process of claim 25, wherein the surface tension of the binder is less than about 60.54 dyne/cm.

27. (New) The process for manufacturing a fiberglass insulation product of claim 18, wherein the surface tension of the binder is less than about 65.75 dyne/cm.

28. (New) The process of claim 27, wherein the surface tension of the binder is less than about 62.87 dyne/cm.

29. (New) The process of claim 28, wherein the surface tension of the binder is less than about 60.54 dyne/cm.